Department of Natural Resources Position on "Cluster Development"

Position Statement

> *Cluster development is one of many tools available to help guide development patterns. When cluster development is used to achieve land use patterns that fit the Common Ground definition of sound land use, the department supports use of the tool. Using cluster development within the framework of local and regional land use plans that lead to compact urban development commensurate with a sustainable level of resource use can improve the likelihood of achieving sound land use. The department encourages local units of government to include these considerations in planning and decision making. Significant environmental and conservation concerns arise, however, when cluster development is used in a manner that does not result in sound land use.*

Background

Cluster development, a residential site design and zoning technique, has recently received renewed attention by community planners, developers, concerned citizens, local media and others. Given the department's concerns about land use decision making, a number of stakeholders have asked "What is the DNR's position on cluster development?" This paper outlines for staff the department's position on cluster development as it relates to broader land use concerns. It is intended to help provide a framework for consistent responses to this question.

The department's position on cluster development, like any other growth management tool, must be put in the context of the department's overall responsibilities and authority. Staff should consult the DNR report *Common Ground* for additional background on the department's approach to land use issues and a definition of “sound“ land use. When questions arise regarding the application of this policy statement, staff should consult with the department's Land Use Team and legal counsel as needed.

What is Cluster Development?

Cluster development is a residential site design and zoning technique used to protect natural, cultural or recreational features of the landscape while allowing new development. The basic idea is to cluster new development on one portion of a property, while leaving a large tract of environmentally sensitive or scenic land intact on the remainder of the parcel. If used carefully, this technique can significantly lower the impact on the natural landscape and minimize the costs of providing public services to new homes since they are located in proximity to each other.

Variations of this technique are used to protect specific landscape values (e.g., rural scenic character or appearance, wildlife habitat corridors, productive agricultural lands, groundwater recharge areas, etc.). For example, the focus of open space zoning might be on creating subdivisions, which have the effect of minimizing impacts to rural appearance, or protecting the scenic quality of a region. Conservation subdivision design, on the other hand, attempts to provide a balance between development and conservation and has as an ultimate goal of creating an interconnected network of protected open spaces weaving throughout a community.

Cluster development should not be confused with planned unit development (PUD). Cluster development places a greater emphasis on protecting open space and typically applies only to residential units. PUDs, on the other hand, focus on infrastructure reduction and often allow compatible commercial development (e.g., convenience stores, office, etc.) to be included in the overall development. A planning commission working with a developer on a PUD may seek to limit development in and adjacent to environmentally sensitive lands, to encourage preservation of agricultural lands, wood lots, or other open spaces, and to keep future

public services costs to a minimum. In these objectives, the PUD is similar to cluster development; however, the process of reaching the objectives is more individualized and is more broadly interpreted in the PUD planning process (i.e. planning commissions are generally more involved throughout the entire process).

Local Government Roles

In Wisconsin, local governments have the primary responsibilities for managing and regulating community growth and development. Cluster development is one of many tools local governments can use to guide residential development. Comprehensive planning, other types of zoning (e.g., large lot, overlay, and performance zoning), capital improvement programming, impact fee requirements, special designations, and subdivision regulations are some of the other tools local governments may chose to help manage growth. In all cases, the choice of the tool(s) is the local government's.

The *Common Ground* report articulates the department's role in land use as one of building partnerships that work together to retain the character of Wisconsin's cities and country sides in ways all the state's citizens value. As such, department staff can assist local governments in selecting the most appropriate tool(s) for their community's needs or interests. DNR staff can also suggest creative ways to bring these tools together under the umbrella of comprehensive planning. The book *Common Groundwork: A Practical Guide to Protecting Rural and Urban Land* is a useful reference for examining the various tools that are available. Each regional Land, Water, and Air and Waste Leader has a copy of this publication. It is also available at the department's library.

Cluster Development and DNR Programs

Like any other type of development, cluster developments will have environmental impacts. These impacts can often be minimized in the planning, site design and construction processes. Some impacts can be avoided completely; others can be mitigated after the fact. In most cases, department staff can work with project proponents, concerned citizens and local governments to proactively address impacts.

The department must apply its regulatory authorities in the same manner to proposals involving cluster developments as it does to proposals involving the use of other growth management tools. For example, questions have surfaced regarding the relationship between a cluster subdivision proposal and the application of a cost-effectiveness evaluation required under NR 110, Wis. Adm. Code, for wastewater facilities. The DNR will continue to follow its regulatory requirements, such as the application of cost-effective analyses to evaluate the efficacy of proposed rural cluster subdivisions served with alternative methods of wastewater treatment. The DNR will also, in the future, begin a process of reviewing its policies, rules, and statutes to determine their impact on land use. This long-term process may help identify areas where a greater balance between sound land use and regulatory controls may be achieved.

For additional information:

1. Arendt, Randall. 1994. *Rural by Design: Maintaining Small Town Character*. APA Planners Press, Chicago.
2. Arendt, Randall. 1996. *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*. Island Press, Washington, DC.
3. Yaro, Robert D. 1988. *Dealing with Change in the Connecticut River Valley*. Lincoln Institute of Land Policy and the Environmental Law Foundation.
4. McHarg, Ian, L. 1991. *Design with Nature*. John Wiley and Sons, New York.
5. Planners Advisory Service. 1980. *The Cluster Subdivision*. APA Planners Press, Chicago

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Ideas for Modifying the Model Zoning 0rdinance (Appendix C)

included in SEWRPC's "Rural Cluster Development Guide"

Background

Cluster development, a residential site design and zoning technique, has received renewed attention by community planners, developers, concerned citizens, local media and others. Recently, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) published a *Rural Cluster Development Guide*. The *Rural Cluster Development Guide* includes a model zoning ordinance for rural cluster development (Appendix C of that document). The model is provided as an example of one way to implement cluster development through a zoning ordinance.

Although this ordinance is presented as a model, there will likely be some Wisconsin communities that will be inclined to use the model "as-is" -- without or with little modification -- even if this particular model is not the most appropriate approach for meeting their community's needs or interests. This will be especially likely in smaller communities that often do not have professional planning staff or adequate financial resources to assist them in changing the document. Although the target for the *Guide* and the model ordinance is southeastern Wisconsin (i.e. the SEWRPC planning area), there are few existing cluster development models and it should be anticipated that the SEWRPC model will be used throughout the state.

Department staff will have opportunities to work with communities considering the use of cluster development as a growth management tool. This paper includes a number of suggestions for strengthening the model ordinance. This paper is **not** intended to be a critical review of the model or a criticism of the work that the SEWRPC has completed. Rather, it is intended to more closely focus the model ordinance on natural resources conservation and management

General Comments

Both the text of the *Rural Cluster Development Guide* and the language of the model ordinance emphasize that the primary intent for clustering in rural areas is to "preserve the rural character" of the landscape. A common outcome of this approach is the creation of subdivisions that have the effect of minimizing impacts to *rural appearance.* While the preservation of rural character is a valid reason for using cluster development, and through this intent, other benefits including environmental benefits may be realized, an alternative intent or purpose and supporting language for cluster development can shift the focus to *land conservation* (rather than just rural character preservation) as a central organizing principle. Although the intent statement of the model ordinance (Section 3.03 A) and the specific objectives that follow include the protection of sensitive natural areas, farmland, and other large areas of open land, some of the specific ordinance provisions suggest that some of these significant features may not be protected as fully as they might be.

Specific Ideas by Ordinance Section

The specific recommendations below are designed with the intent of offering the DNR's perspective as an agency charged with the protection of the state's natural resources. While there are no legal mandates requiring this greater degree of environmental protection, the department believes that there are communities that have an interest in land conservation as a central element of their vision for their community's future, and that there may be interest in ordinance provisions that afford a greater degree of protection.

Section 3.03 A. - An alternative purpose statement which states that the purpose of the District is for *conservation subdivision design* -- a district where land conservation is the central organizing principle

around which house lots, streets and other infrastructure are sensitively designed -- could more constructively address land conservation.

Section 3.03 A.1. - Consistent with the alternative intent statement suggested above, an alternate objective could be stated so that the *primary focus of this objective is natural resource protection* rather than just maintenance and protection of rural character. Rural communities might also consider including the viability of agriculture in their objectives.

Section 3.03 A.4. - Consistent with the above ideas, minimizing disturbance to environmentally sensitive areas, protecting biological diversity, maintaining environmental corridors and protecting the viability of agricultural land could be added to the end of this item.

Section 3.03 A.6 or additional objective. - An additional concept, which could be considered, is facilitating the creation of an interconnected network of protected open spaces *that extends beyond the individual subdivision* boundary and functions as a building block within a community, county or region-wide system of open space. This can be accomplished through effective subdivision layout, especially if the layout is done consistent with the locational criteria in the open space, recreation and natural resource element of an area-wide comprehensive plan, town plan, etc.

Section 3.03 B.1. - Why not mention the possibility of including some percentage of affordable and multi-family units (e.g., duplexes) among the permitted uses? This option often improves affordability and may have some implications towards reducing sprawl. Additionally, are there some commercial uses other than the agricultural uses permitted (e.g. day care centers/schools, places of worship, etc.) that could be consistent with the purpose of the district?

General comment – Including a requirement(s) for an economically and/or environmentally viable plan for the open space (depending on the goals of the open space and the resources and uses involved) would help minimize uncertainty and risk associated with the cluster design approach for individual property owners.

Section 3.03 B.1.1 - A blanket 60% of the gross development tract in common open space seems problematic considering the variation in the amount of land on a given tract with environmental constraints (e.g. wetlands, floodways, steep slopes, etc.) already restricting the buildability of the site. Although Section C of the "Optional Additional Regulation" section discusses using a net buildable area approach, which it correctly states is more appropriate on land with significant environmental constraints, how does that translate back into the percentage of open space requirement in this section?

General comment - Depending on the size and use of the tract involved, there may or may not be a viable tract of land for the intended purpose. For example, will clustering on small lots (40 acres) versus large lots (400 acres) allow agricultural open space as a viable option? Farm fields must be big enough to support farm operations, and the number of farms and their proximity to residential areas must provide the opportunity for agricultural practices (i.e. spray irrigation, land spreading, etc) without potential conflicts "setup" by the very nature of the intended rural design.

Section 3.03 B.2. - The uses permitted in the common open space range from conserving natural features on one end of the spectrum to parking areas to serve active recreation facilities on the other end of the spectrum. While all of the uses listed may be appropriate within protected common open space, the *ordinance provisions do not appear to be strong enough to prevent or discourage some of the more intensive or potentially environmentally damaging uses within some of the more pristine environmental areas.* (This concern will be discussed in greater detail in the review of Section 3.03 F below).

Section 3.03 B.2.b. – Communities can consider placing a limit on the percentage of the required minimum open space that mound systems and treatment ponds can occupy as these areas yield few open space benefits. However, it should also be recognized that Department of Commerce regulations require additional area for siting a replacement on-site system should the initial system fail. A replacement system

may not be needed for many years, if at all; the longevity of on-site systems is dependent upon many factors. The dedicated area for the replacement system could be considered a part of the open space.

Section 3.03 B.2.d. - The allowance of parking lots for active recreation areas in common open space *appears to contradict* the provision in Section 3.03 F.4.d, which *does not* allow parking lots to be included in the calculation of common open space areas. If the intent was to purposely not allow parking lots to be considered in the calculation of open space, this should probably be stated in 3.03 B.2.d or referenced in Section 3.03 F.4.d. If parking lots are to be permitted within common open space, and be included in determining percentage of open space, *it would be desirable to place limitations on the size or percentage of open space such uses can occupy because of concerns over loss of wildlife habitat, increases in storm water runoff, etc.*

Section 3.03 B.2.e. - A Section 4.00 (not included in appendix) is referenced here pertaining to conditional uses. Considering some of the more intensive or land altering permitted uses as conditional uses, rather than permitting them as a matter of right, would help assure that such uses are developed in a manner that is consistent with the stated ordinance purpose and objectives.

Section 3.03 B. 4. - Because of the way the model ordinance is structured, it is not immediately apparent whether the listed permitted accessory uses are allowed within the common open space. Clarification of this point is important.

Section 3.03 C. - Inventory and site analysis are crucial components of the cluster design process; the analysis must immediately follow the inventory. The model subdivision ordinance contains excellent site analysis requirements. What are *missing here, and elsewhere in the model zoning ordinance, are specific criteria defining the important characteristics of those natural features that are to be considered significant*. Such criteria should be modified regionally, as what is significant and warrants protection or is appropriate for restoration will vary from area to area (e.g., protecting small isolated woodland areas or developing tall grass prairie may be more appropriate in southern Wisconsin than in northern Wisconsin).

Without specific criteria, a site planner will not be able to successfully design the development around the significant features, and individuals evaluating the plan will not know how to evaluate whether the site's significant natural (and other) features are protected or whether the ordinance intent is upheld. One way of accomplishing this is explained in Randall Arendt's book *Conservation Design for Subdivisions* (Island Press, Washington, DC. 1996). The SEWRPC model ordinance contains a section titled "Evaluation Criteria." This section clearly lays out the parameters for which a plan can be evaluated as to whether the design is "appropriate to the site's natural, historic and cultural features, and meeting the purpose of the ordinance." Included in this section are the specific characteristics of the woodlands and other natural features that warrant protection. The text states that the RPC shall evaluate conceptual plans considering the stated criteria.

An evaluation or priority ranking of the significant features should be included as part of the site analysis (e.g., from SEWRPC's *A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin*) so that relative priorities for preservation within the identified secondary conservation areas (as defined by Arendt in *Conservation Design for Subdivisions*) can be made. Given the format of these models, this specific criteria (or reference to the *Regional Natural Areas* document) could potentially be located in the site analysis section of the subdivision ordinance, or in the section of the model zoning ordinance titled "Design Standards for Common Open Space."

The significant features need to be effectively identified, mapped and evaluated by trained professionals. Including the necessary qualifications for the site evaluator in the ordinance or referencing an alternative document (e.g., SEWRPC's *A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin*) with the requirements stated is recommended.

3.03 F.2.b. - It is not clear from the model ordinance language whether the "larger continuous and integrated open space system" and the associated dimensions referenced are referring to *areas within the*

subdivision itself or to an interconnected network of protected open spaces which *extend beyond the subdivision into a community, county, or region wide planned system* of open space. Both concepts are important and should be well articulated as separate standards.

Although 3.03 F.2.f. states that common boundaries with existing or future open space on adjacent tracts shall be maximized as shown in a comprehensive plan, this standard does not help foster a vision of the importance of looking at the "big" landscape picture and the benefits of protecting a system of interconnected open space (i.e. environmental corridor) lands. Specific language to support a larger vision of interconnected open spaces/corridors over a regional perspective would help.

3.03 F.2.c. - Consistent with previous comments, alternative language which states that the common open space shall, to the greatest extent possible, protect natural resources (as well as preserve rural character) would strengthen this part of the ordinance.

3.03 F.2.d. - The language stating that natural features *may be modified to "improve their appearance*" may be subject to a great deal of interpretation. For example, does this provision allow for a manicured active recreation area to be placed in an old field/meadow area or into a healthy and diverse woodland if the project proponent and reviewers believe that it would be an aesthetic improvement?

Without specific criteria defining what constitutes an ecologically significant feature that should be preserved, it will be difficult to assess the appropriateness of such a proposal. In this case, it may be appropriate to convert the field area, if it is dominated by "weed" species and there are an abundance of field areas in the vicinity. On the other hand, if it is a healthy, diverse woodland area or remnant prairie, it may not be appropriate to alter it, especially if that type of habitat is regionally scarce.

3.03 F.2.e. - What is the basis for the 80% figure? It appears that the language requiring that "at least 80% of the upland primary environmental corridor shall be contained in common open space" contradicts the ordinance objective language in Section 3.03 A.1 and the common open space design standard language of Section 3.03 F.2.c. Both sections state that primary environmental corridors are of particular significance for conservation/ protection. Not only does this 80% figure translate into 20% of the primary environmental corridor being automatically permitted for being drastically altered for use for lots and residential development, the model ordinance language is not strong enough to prevent an additional percentage of that same corridor land being converted to active recreation land. Such changes would generally have the effect of significantly reducing or eliminating the natural values of the site. Permitting 20% of the primary environmental corridor lands to be developed also contradicts Section 3.03 F2.d of the model ordinance, which says that natural features shall generally be maintained in their natural condition.

3.03 F.2.g. - The standard that no trees shall be removed from ridgetops or hilltops is very restrictive. Communities may want to have some flexibility to remove non-native or other "weed" trees, especially if they are not in a viewshed area where tree cover is essential for preserving scenic views. It may also be that some other community type (e.g. prairie) is more appropriate in certain situations.

3.03 F.2.h. – Concerns with this section are similar to those expressed for Section 3.03 F.2.e. Again, the language here seems to contradict the language giving primary and secondary environmental corridors status for protection.

Additionally, the language stating that "No woodlands shall be removed..." is extremely vague. It implies that one may be allowed to leave a small remnant of woodland intact and be in compliance with this provision. Conversely, in certain limited situations, it may be desirable to remove a woodland area to develop or restore a different community type (e.g., prairie habitat in southwest Wisconsin).

The biggest concern with the permitted encroachment into wooded or other environmental corridor or secondary conservation areas is that as drafted the model *does not contain sufficient guidelines* to protect the significant areas and to guide development around those areas or if necessary into the least

environmentally significant areas. For example, if the site has an abundance of woodlands, any necessary encroachment should be permitted *only* in the woodland areas *not* meeting the specified criteria for being considered significant. This approach would likely protect mature, healthy forests with an abundance of native species over early successional forests with lots of "weed" trees and an abundance of invasive, nonnative species. Other factors such as whether permitting the encroachment would result in fragmentation of the corridor could also be factors in deciding the appropriateness of the encroachment.

3.03 F.2.h.1 & 2 - Again, ordinance provisions could be crafted so that any increased encroachment into woodlands would occur in the areas that are least ecologically significant or do not meet the criteria for protection stated in the open space standards or other ordinance sections (or ancillary documents). If these wooded areas are within environmental corridors, once again the language appears to contradict the model ordinance provisions, which place emphasis on the conservation/preservation of environmental corridors (sections 3.03 A1. and 3.03 F2.c.).

3.03 F.2. (additional comments) - Although 60% of the gross development tract is required to be in common open space, a restriction on the amount of common open space area that can be used for active recreation facilities would help assure that a reasonable portion of, and the most significant of, the natural areas on the site receive protection.

3.03 F. - A storm water management component could be added to this part of the model ordinance.

3.03 G.3 - Although Section 3.03 D.12.a.7 provides that there be a 35 foot distance from wetlands, floodplains and watercourses from the outer boundaries of cluster groups, from a natural resources protection standpoint, it would be beneficial to also include buffer requirements for watercourses and wetlands in the section on buffers. Buffer requirements could contain both structure setback and planting requirements designed to protect water quality and prevent flooding. Reference to, or adoption by reference of, the county shoreland ordinance requirements for building setbacks may prevent permitted accessory structures from being constructed too close to navigable waterways in violation of state and local shoreland zoning standards. Building within 35 feet of navigable waters would be inconsistent with NR 115, Wis. Adm. Code. NR 115 does not currently allow relaxation of minimum lot width and size requirements to accommodate clusters of smaller lots in the shoreland. The density of dwellings constructed within the shoreland zone cannot exceed the standards in NR 115. In addition, communities may want to take a close look at the types of development permitted in floodfringe areas.

Other Comments – Communities may want to consider incorporating a plan/strategy for addressing urban wildlife issues such as white-tailed deer, Canada goose and coyote proliferation within the open space areas. With increased open-space the potential for conflicts between wildlife and homeowners/nearby farmers is also increased.